

## **ADOLESCENTES INFLUYENTES: GRETA THUNBERG Y LA LUCHA CONTRA EL CAMBIO CLIMÁTICO**

El cambio climático es el conjunto de grandes y rápidas perturbaciones del clima por el aumento de la temperatura del planeta, produciendo a nivel global importantes efectos a los que la humanidad debe hacer frente. Desde 2018, la adolescente sueca Greta Thunberg se ha convertido en una potente activista medioambiental, conocida por su contundente manera de hablar. En el marco de la Psicología Social y tomando como referencia investigaciones sobre actitudes del ámbito de la Psicología Ambiental, se pretende estudiar la capacidad de influencia de la joven Greta sobre las ideas de la población con respecto a dónde reside la responsabilidad de la contaminación a partir del visionado de su discurso.

Para evaluar la influencia se adapta un estudio experimental llevado a cabo por Mugny (1981), utilizando un diseño pre y post-intervención con grupo control. La intervención es el visionado de un discurso de Greta sobre el cambio climático o una temática ajena para el grupo control. Se espera encontrar diferencias significativas en función de la ideología política y nivel educativo, y diferencias entre el grupo control y experimental en el post-test: el segundo grupo puntuará más alto en los ítems relacionados con la opinión minoritaria.

Los resultados de la prueba t de comparación de medias evidencian diferencias significativas en el grupo experimental antes y después del vídeo de Greta, así como diferencias con el grupo control en el post-test. Además, aparecen diferencias significativas en función de la ideología política y el nivel educativo. Los datos reflejan cierto cambio actitudinal, es decir, los participantes adoptan actitudes más proambientales, que son atribuibles al discurso de Greta Thunberg. Además, encontramos mayor concienciación y preocupación previa entre quienes tienen mayor nivel educativo y una ideología de izquierdas.

## **INFLUENTIAL TEENAGERS: GRETA THUNBERG AND THE FIGHT AGAINST CLIMATE CHANGE**

Climate change is the set of large and rapid disturbances of the climate by the increase in the temperature of the planet, producing globally important effects that humanity must face. Since 2018, Swedish teenager Greta Thunberg has become a powerful environmental activist, known for her forceful speech. Within the framework of Social Psychology and taking as a reference research on attitudes in the field of Environmental Psychology, the aim is to study the capacity of influence of the young Greta on the ideas of the population regarding where the responsibility of pollution lies from the vision of her discourse.

To evaluate the influence, an experimental study carried out by Mugny (1981) is adapted, using a pre- and post-intervention design with a control group. The intervention is the viewing of Greta's speech on climate change or an unrelated subject to the control group. We expect to find significant differences according to political ideology and educational level, and differences between the control and experimental groups in the post-test: the second group will score higher on items related to minority opinion.

The results of the t-tests for comparison of means show significant differences in the experimental group before and after Greta's video, as well as differences with the control group in the post-test. In addition, significant differences appear according to political ideology and educational level. The

data reflect some attitudinal change, that is, participants adopt more pro-environmental attitudes, which are attributable to Greta Thunberg's speech. In addition, we found greater awareness and prior concern among those with higher educational level and a left-wing ideology.

## INTRODUCTION

Within the framework of Social Psychology, many authors have studied the minority influence processes, some of which stand out, such as Moscovici, Pérez and Mugny or Tanford and Penrod. At the same time, due to a series of historical events, Environmental Psychology arises, whose interest lies in the study of concern about the environment and its consequences, focusing on attitudes. In this context, investigations such as those of Weigel & Weigel (1978) or Aragonés & Américo (1991) highlight the **educational level** (higher educational level) and **political ideology** (left-wing) as the sociodemographic variables which are most related to environmental concern.

**Climate change** is the set of large and rapid disturbances of the climate by the increase of the planet's temperature, producing at global level important effects that humanity must face (Ecologists in Action, 2006). Since 2018, Swedish teenager **Greta Thunberg** has become a powerful environmental activist, known for her forceful speaking and mobilizing young people, giving strength to the Fridays for Future movement.

Thus, taking the previously mentioned research as a reference, the aim is to study the capacity of influence of the young Greta on the ideas of the population regarding where the **contamination responsibility (CR)** and the **risk perception (RP)** lie from the vision of her discourse. For this purpose, **Mugny's (1981) "contamination" paradigm** has been adapted, using a pre- and post-intervention design, with an experimental group (EG) and a control group (GC).

Three hypotheses are proposed:

**H1:** in the first phase, there will be significant differences in CR and RP depending on the political ideology and level of studies of the participant: left-wing ideology and higher educational level will correlate positively.

**H2:** in the EG, significant differences are expected to be found in RC between the first and second phase.

**H3:** in the second phase, differences are expected to be found between the EG and the CG with respect to CR.

## METHOD

**Participants** (non-probability sampling for convenience):

Initial sample: N = 163; 46,6% M y el 52,1% W; age:16-74 years old (M = 35,87 and SD = 15,86).

- **Political ideology (IP):** 49.7% left-wing, 39.3% centre and 11% right-wing.
- **Educational level (NE):** 12.2% elementary ed. (EO), 30.7% middle ed. (EM), 49.7% higher ed. (ES) and 7.4% master (M).

Final sample: N = 62; 45,2% M y 54,8% W; age: 19-63 years old (M = 35,95 and SD = 15,5).).

- Experimental group (GE): N = 33
  - Control group (GC): N = 29
- The distribution in terms of IP and NE remained equal

**Procedure:**

**1<sup>st</sup> PHASE. PRE-TEST:** initial sample; socio-demographic questions + RC + PR + CA.

**2<sup>nd</sup> PHASE. INDUCTION – POST-TEST:** final sample; video + RC + PR + IM.

**Materials:**

**Contamination responsibility (RC)** (Mugny, 1981), 20 items divided into:

- Responsible Social categories (CR).
  - Responsible Industries (IR).
  - Non-responsible Social categories (CnR).
  - Non-responsible Industries (InR).
  - Mutual responsibility (Both).
- Minority opinion

Majority's image (IM) (Mugny, 1981), 40 adjectives.

**Risk perception (PR)** (Pinazo & Agut, 2008), 12 items.

Activist commitment (CA) (Pinazo & Agut, 2008), 2 items.

**Induction video:** Greta Thunberg (own elaboration) vs. Paris' promotional video (Plissken Production, 2015).

**Statistical analysis:** IBM SPSS Statistics (25 version).

## RESULTS

\*In H1 similar results were obtained with PR.

### H1: ANOVA + HSD Tukey. NE – RC comparison

ITEM	COMP.	I-J	SIG.
1. CR	EO – M	1.667	.036
3. InR	EO – EM	1.060	.033
	EO – ES	1.460	.001
	EO – M	1.967	.002
4. Both	EO – M	2.500	.001
7. Both	EO – EM	1.610	.022
	EO – M	3.003	.001
	ES – M	2.145	.007
10. InR	EO – ES	1.172	.012
12. InR	EO – ES	1.064	.024

### H1: Pearson correlation RC - IP

ITEM	r	SIG.
2. InR	.228	.003
10. InR	.224	.004
11. IR	-.221	.004
20. IR	-.286	.000

### H3: ANOVA. RC: GE – GC comparison

ITEM	F	SIG.
2. InR	4.422	.040
7. Both	5.350	.024
13. Both	5.437	.023
14. CR	5.075	.028

### H1: ANOVA + HSD Tukey. IP – RC comparison

ITEM	COMP.	I-J	SIG.
1. CR	Left – Centre	-.723	.029
2. InR	--	--	.037
4. Both	Left – Centre	-.923	.009
10. InR	Left – Centre	-.630	.036
11. IR	Left – Right	1.049	.039
17. CnR	--	--	.064
19. Ambos	--	--	.097
20. IR	Left – Centre	.698	.038
	Left – Right	1.167	.023

### H1: Pearson correlation RC - NE

ITEM	r	SIG.
1. CR	-.156	.048
2. InR	-.155	.048
3. InR	-.293	.000
10. InR	-.224	.004
12. InR	-.218	.005
20. IR	.166	.034

### H2: T-test. GE - RC: first and second phase

ITEM	t	SIG.
8. CnR	3.171	.003
18. CnR	2.031	.050

## CONCLUSIONS

Before watching the video, significant differences were found between the sample with respect to RC and PR, as revealed by the results of the ANOVA + Tukey tests. In this line, it has been observed that those with a greater NE or who

identify themselves with a more left winged ideology attribute RC, to a greater extent, to large industries, and show greater concern for the consequences of climate change. That is, they score higher on those items that reflect minority opinion. Therefore, **H1** is **confirmed**.

In GE there are significant differences between

the first and second phase in the attribution of RC in those items that defend social categories (CnR - minority opinion). In other words, there is a change in attitudes after listening Greta's speech, in the responsibility that social classes have regarding pollution. Therefore, **H2** is **partially confirmed**.

Finally, significant differences appear in the second phase between GE and GC regarding RC. Results show the biggest change in those items that attribute mutual responsibility. Unlike the proposed in H3, these differences have not been found in the items which are representative of the minority opinion, so **H3** is **rejected**.

Overall, the results show a **certain degree of influence** of Greta's discourse on public opinion regarding RC. However, this influence seems to be limited to those people whose ideas are allied to her discourse. Nevertheless, due to the sample's size the results are not representative and more investigation will be needed.

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